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ABSTRACT

A seal assembly for a solid oxide fuel cell stack, includes at least two fuel cell stack components having opposed surfaces and a seal member disposed between the surfaces, wherein the seal member is a compliant seal member that is mechanically compliant in both in-plane and out-of-plane directions relative to the surfaces. The seal member is advantageously formed of one or more substantially continuous fibers. Further, preferred materials for the seal member are provided which advantageously allow for a desired level of impermeability while preventing contamination of the fuel cell stack.